

AMENDMENTS TO THE CLAIMS

Claims 1-21 (Canceled)

Claim 22 (Currently Amended) A method of detecting a biomolecule, comprising reacting a biomolecule sample and a probe labeled with an organic EL-dye comprising a condensed poly-ring compound including an azole compound or imidazole compound, and measuring the fluorescence of the biomolecule sample labeled with the organic EL-dye.

Claim 23 (Original) The detection method according to claim 22, wherein said biomolecule sample is a nucleic acid and said probe is an oligonucleotide or PNA having a base sequence complementary to said nucleic acid.

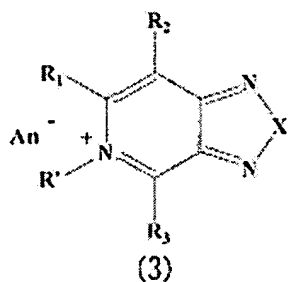
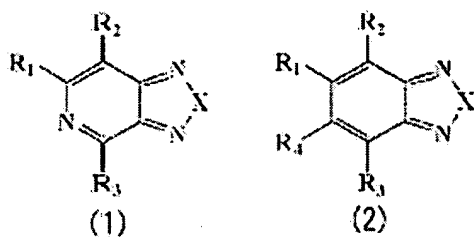
Claim 24 (Original) The detection method according to claim 23, wherein said oligonucleotide is a primer or terminator, and the fluorescence measurement is carried out after amplifying the nucleic acid.

Claim 25 (Original) The detection method according to claim 24, wherein said primer is labeled with the organic EL-dye prior to amplifying the nucleic acid.

Claim 26 (Original) The detection method according to claim 23, wherein said oligonucleotide or PNA is a molecular beacon.

Claims 27-32 (Canceled)

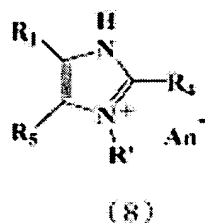
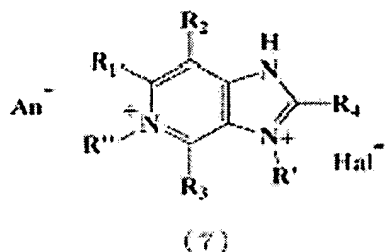
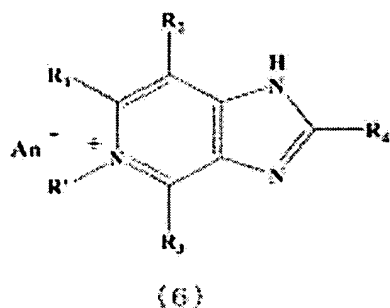
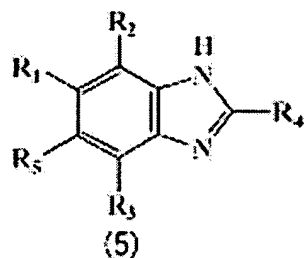
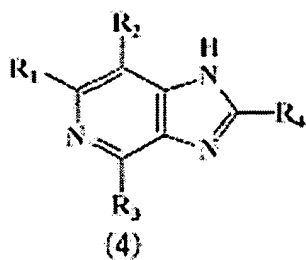
Claim 33 (New) The detection method according to claim 22, wherein said azole compound is a compound of the following general formula (1) , (2) or (3):



wherein, R_1 , R_2 , R_3 and R_4 represent each independently an aromatic hydrocarbon group, hydrocarbon group or heterocyclic group, optionally substituted by a halogen atom, hydroxyl group, cyano group or sulfonyl group, and X represents a nitrogen atom, sulfur atom, oxygen atom or selenium atom, R' represents an aliphatic hydrocarbon group optionally substituted by an aromatic ring or aromatic hydrocarbon group and An^- represents an ionic group comprising halide ion, $CF_3SO_3^-$, BF_4^- , or PF_6^- .

Claim 34 (New) The detection method according to claim 33 wherein the aromatic ring is an aromatic hydrocarbon group.

Claim 35 (New) The detection method according to claim 22, wherein said imidazole compound is a compound of the following general formula (4), (5), (6), (7) or (8):



wherein, each of R_1 , R_2 , R_3 and R_4 and R_5 represents each independently an aromatic hydrocarbon group, aliphatic hydrocarbon group or heterocyclic group, optionally substituted by a halogen atom, hydroxyl group, cyano group or sulfonyl group, R' and R'' represent an aliphatic hydrocarbon group optionally substituted by an aromatic ring and An^- represents an ionic group comprising halide ion, $CF_3SO_3^-$, BF_4^- , or PF_6^- .

Claim 36 (New) The detection method according to claim 35 wherein the aromatic ring is an aromatic hydrocarbon group.

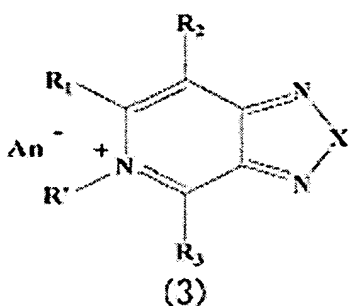
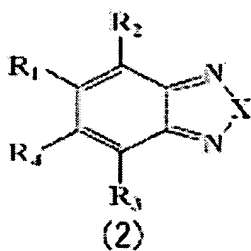
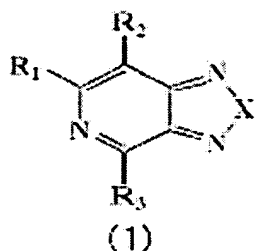
Claim 37 (New) A method of detecting a biomolecule, comprising size separating a biomolecule sample by electrophoresis, wherein the biomolecule sample is labeled with an

organic EL-dye comprising a condensed poly-ring compound including an azole compound or imidazole compound prior to the electrophoresis or after the electrophoresis.

Claim 38 (New) The detection method according to claim 37, wherein said biomolecule sample is a nucleic acid and base sequence(s) of the nucleic acid is determined based on the electrophoresis image of the labeled nucleic acid.

Claim 39 (New) The detection method according to claim 37, wherein said biomolecule sample is a protein and the protein removed from the sample based on the electrophoresis image is identified by mass analysis.

Claim 40 (New) The detection method according to claim 37, wherein said azole compound is a compound of the following general formula (1) , (2) or (3):

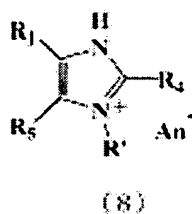
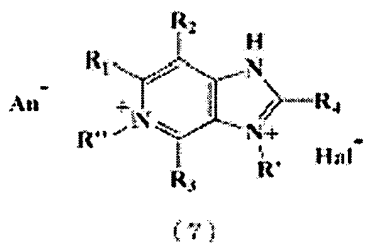
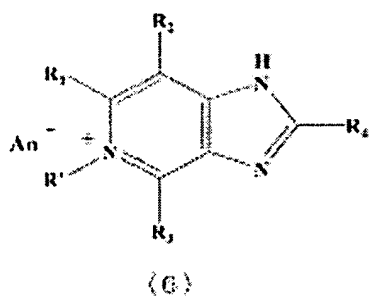
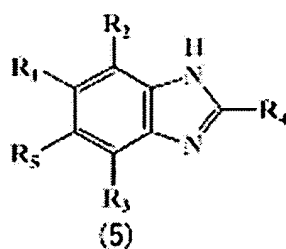
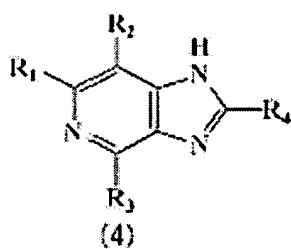


wherein, R_1 , R_2 , R_3 and R_4 represent each independently an aromatic hydrocarbon group, hydrocarbon group or heterocyclic group, optionally substituted by a halogen atom, hydroxyl group, cyano group or sulfonyl group, and X represents a nitrogen atom, sulfur atom, oxygen atom or selenium atom, optionally having a substituent, R' represents an aliphatic hydrocarbon

group optionally substituted by an aromatic ring or aromatic hydrocarbon group and An^- represents an ionic group comprising halide ion, $CF_3SO_3^-$, BF_4^- , or PF_6^- .

Claim 41 (New) The detection method according to claim 40 wherein the aromatic ring is an aromatic hydrocarbon group.

Claim 42 (New) The detection method according to claim 37, wherein said imidazole compound is a compound of the following general formula (4), (5), (6), (7) or (8):



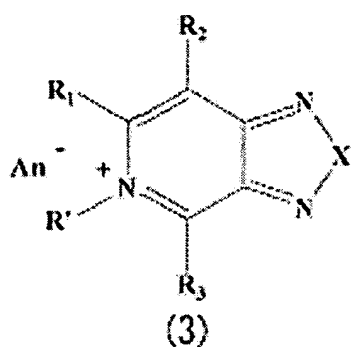
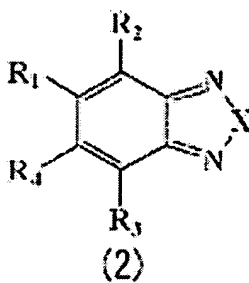
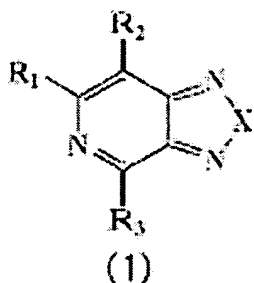
wherein, each of R_1 , R_2 , R_3 , R_4 and R_5 represents each independently an aromatic hydrocarbon group, aliphatic hydrocarbon group or heterocyclic group, optionally substituted by a halogen atom, hydroxyl group, cyano group or sulfonyl group, R' and R'' represent an aliphatic hydrocarbon group optionally substituted by an aromatic ring and An^- represents an ionic group comprising halide ion, $CF_3SO_3^-$, BF_4^- , or PF_6^- .

Claim 43 (New) The detection method according to claim 42 wherein the aromatic ring is an aromatic hydrocarbon group.

Claim 44 (New) A method of dyeing tissues or cells, comprising labeling a biomolecule in tissues or cells with an organic EL-dye.

Claim 45 (New) The dyeing method according to claim 44, wherein said biomolecule is a nucleic acid or protein.

Claim 46 (New) The detection method according to claim 44, wherein said azole compound is a compound of the following general formula (1), (2) or (3):

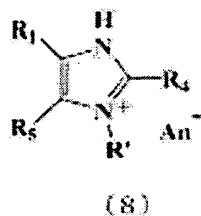
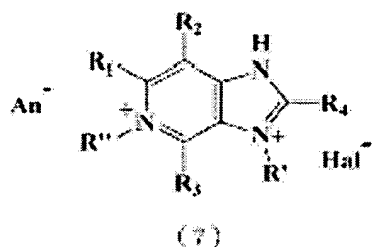
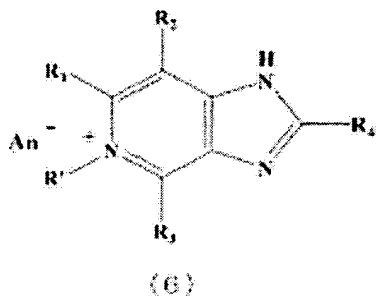
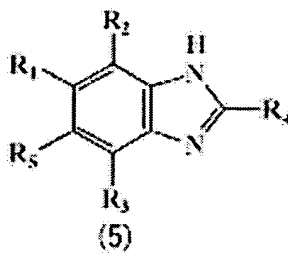
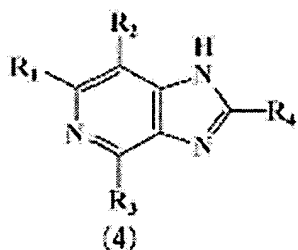


wherein, R₁, R₂, R₃ and R₄ represent each independently an aromatic hydrocarbon group, aliphatic hydrocarbon group or heterocyclic group, optionally substituted by a halogen atom,

hydroxyl group, cyano group or sulfonyl group, and X represents a nitrogen atom, sulfur atom, oxygen atom or selenium atom, optionally having a substituent, R' represents an aliphatic hydrocarbon group optionally substituted by an aromatic ring and An⁻ represents an ionic group comprising halide ion, CF₃SO₃⁻, BF₄⁻, or PF₆⁻.

Claim 47 (New) The detection method according to claim 46 wherein the aromatic ring is an aromatic hydrocarbon group.

Claim 48 (New) The detection method according to claim 44, wherein said imidazole compound is a compound of the following general formula (4), (5), (6), (7) or (8):



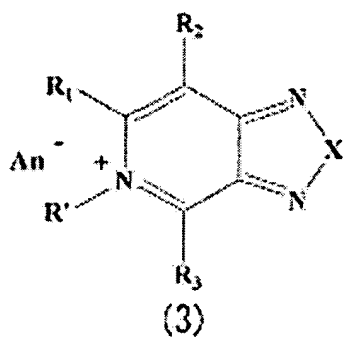
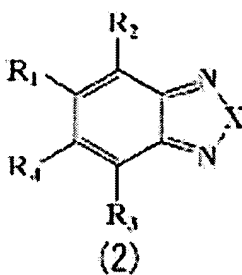
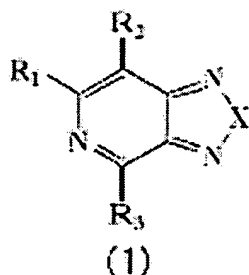
wherein, each of R₁, R₂, R₃, R₄ and R₅ represents each independently an aromatic hydrocarbon group, aliphatic hydrocarbon group or heterocyclic group, optionally substituted by a halogen

atom, hydroxyl group, cyano group or sulfonyl group, R' and R'' represent an alkyl group optionally substituted by an aromatic ring and An⁻ represents an ionic group comprising halide ion, CF₃SO₄⁻, BF₄⁻, or PF₆⁻.

Claim 49 (New) The detection method according to claim 48 wherein the aromatic ring is an aromatic hydrocarbon group.

Claim 50 (New) A chromatic dye used for dyeing tissues or cells, comprising an organic EL-dye having reactive groups to bind with a biomolecule of tissues or cells.

Claim 51 (New) The detection method according to claim 50, wherein said azole compound is a compound of the following general formula (1), (2) or (3):

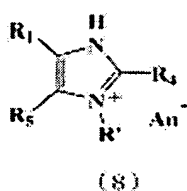
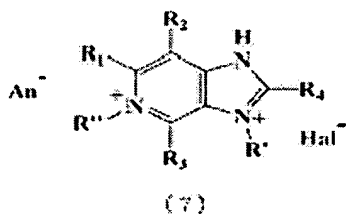
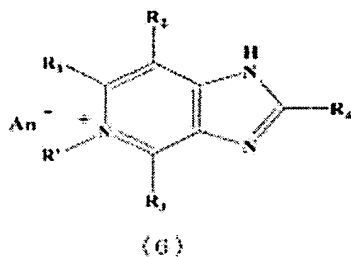
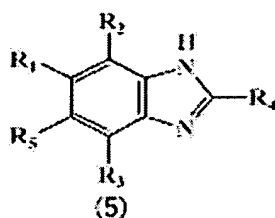
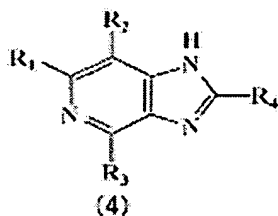


wherein, R₁, R₂, R₃ and R₄ represent each independently an aromatic hydrocarbon group, aliphatic hydrocarbon group or heterocyclic group, optionally substituted by a halogen atom, hydroxyl group, cyano group or sulfonyl group, and X represents a nitrogen atom, sulfur atom,

oxygen atom or selenium atom, optionally having a substituent, R' represents an aliphatic hydrocarbon group optionally substituted by an aromatic ring and An⁻ represents an ionic group comprising halide ion, CF₃SO₄⁻, BF₄⁻, or PF₆⁻.

Claim 52 (New) The detection method according to claim 51 wherein the aromatic ring is an aromatic hydrocarbon group.

Claim 53 (New) The detection method according to claim 50, wherein said imidazole compound is a compound of the following general formula (4), (5), (6), (7) or (8):



wherein, each of R₁, R₂, R₃, R₄ and R₅ represents each independently an aromatic hydrocarbon group, aliphatic hydrocarbon group or heterocyclic group, optionally substituted by a halogen atom, hydroxyl group, cyano group or sulfonyl group, R' and R'' represent an aliphatic hydrocarbon group optionally substituted by an aromatic ring and An⁻ represents an ionic group comprising halide ion, CF₃SO₃⁻, BF₄⁻, or PF₆⁻.

Claim 54 (New) The detection method according to claim 53 wherein the aromatic ring is an aromatic hydrocarbon group.